ABSTRACT

The Ontario Coalition for Sustainable Infrastructure (OCSI) is a network of six well established organizations in Ontario, including Municipal Engineers Association (MEA), Municipal Finance Officers’ Association (MFOA), Ontario Good Roads Association (OGRA), Ontario Public Works Association (OPWA), Ontario Water Works Association (OWWA) and Water Environment Association of Ontario (WEAO). Each organization has an interest in the area of public infrastructure, and together we raise the awareness of the needs of the municipal sector so that their infrastructure challenges can be addressed in a more effective way than as individual organizations. OCSI is a single point of contact for the provincial government and the federal government, as well as other interest groups.

We have built on our partnership with the Ministry of Infrastructure (MOI) in 2012, when OCSI was invited to the private consultation on June 8th, 2012 on the proposed Guide for Municipal Asset Management Plans and the on-line Toolkit. We have continued to connect with MOI, as well as others. In this paper we will provide an update of the initiatives of OCSI in 2013 in working on our mission of promoting “Safe and Sustainable Infrastructure”.

INTRODUCTION

Consider that the Romans built the aqueducts back in 312 BC and a few are still partly in use. The building of infrastructure defined the people, as stated in the Roman Antiquities by Dionysius of Halicarnassus, “The extraordinary greatness of the Roman Empire manifests itself above all in three things: the aqueducts, the paved roads, and the construction of the drains.” Could we survive and thrive in our modern communities without reliable and sustainable infrastructure?
The mission of the Ontario Coalition for Sustainable Infrastructure (OCSI) is the promotion of “Safe and Sustainable Infrastructure”. OCSI brings together the combined resources of six well-established organizations to work toward sustainable infrastructure in Ontario. The Coalition comprises:

- Municipal Engineers Association (MEA)
- Municipal Finance Officers’ Association (MFOA)
- Ontario Good Roads Association (OGRA)
- Ontario Public Works Association (OPWA)
- Ontario Water Works Association (OWWA)
- Water Environment Association of Ontario (WEAO)

As illustrated in Table 1, below, the membership of our constituent associations reaches nearly every municipality in Ontario and covers the broad categories of infrastructure from roads and bridges, water, wastewater and stormwater as well as public works, municipal engineers and municipal finance in general.

<table>
<thead>
<tr>
<th>Association</th>
<th>Membership*</th>
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<tbody>
<tr>
<td>MEA</td>
<td>670 members</td>
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<tr>
<td>MFOA</td>
<td>365 municipalities, circulation of 2,900 in member municipalities</td>
</tr>
<tr>
<td>OGRA</td>
<td>423 municipalities, 20 First Nations, 228 corporate members</td>
</tr>
<tr>
<td>OPWA</td>
<td>630 members</td>
</tr>
<tr>
<td>OWWA</td>
<td>1,600 members</td>
</tr>
<tr>
<td>WEAO</td>
<td>1,300 members</td>
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*Numbers as at December 2013. Some members belong to more than one organization.
Our membership works in the public sector and they fully understand the challenges and needs. As a non-profit, non-government organization, we have an open mind and do not have any self-interest that could influence our positions. As members (stakeholders and operators of municipal systems), our primary objective/job is:

- good management of the public system;
- providing services to the public; and
- taking the long-term view, which is essential in planning sustainable infrastructure.

BACKGROUND OF OCSI

Why Did OCSI Form?

Back in 2006, a number of associations involved in Ontario’s infrastructure concurrently came to the realization that:

- They shared a number of common issues.
- They could share resources and knowledge on these issues.
- They could better raise awareness and influence such issues by working together.

Provincial ministries were asking “Who should we talk to about infrastructure issues?” because no single organization existed.

Goals of OCSI

The goals of OCSI are:

- To provide professional advice relating to public infrastructure in Ontario, and promote reasonable, workable legislation relating to that subject.
- To facilitate the sharing of information among member organizations and coordinate their approaches to common issues.
- To be an authoritative, consolidated professional voice on infrastructure matters in Ontario.
- To be a resource partner that government can count on for sound, proactive advice.
- To promote sustainable funding.
Objectives of OCSI for 2013 and 2014

The objectives for OCSI for the 2013 to 2014 work plan include:

- **OUTREACH**: Be well known to MOI and other appropriate external stakeholders (e.g., MOE, MMAH, other professional organizations, other supporters).
- **AWARENESS**: Raise profile of OCSI within member organizations.
- **ACTION**: Deliver projects of interest to member organizations.
- **ADMINISTRATION**: Be a well-run organization.

Operations

Each member organization is represented by a Board member and their Executive Director. We meet face-to-face at quarterly meetings and as needed by conference calls. The management committee consists of the Chair, the Vice Chair (a rotating position amongst the six associations) and Executive Director. We develop and approve a two year work plan and budget, with an annual contribution of $3,000 per organization (2013 level).

PROJECTS

Recent Achievements and Initiatives

Building on our partnership with the Ministry of Infrastructure (MOI) in 2012, when OCSI was invited to the private consultation on June 8th, 2012 on the proposed Guide for Municipal Asset Management Plans and the on-line Toolkit, we have continued to connect with MOI in the development of the Municipal Infrastructure Strategy – Building Together.

On the project side, we submitted an unsolicited proposal to MOI in early 2013, focusing on a survey of how municipalities in Ontario are addressing the challenge of managing their infrastructure assets. Minister Glen Murray replied in May and we met with the Minister in August to discuss the proposal and other initiatives. In advance of the meeting we met with his parliamentary assistance, Kevin Flynn, MPP. OCSI participated in the public consultation process on the $100 million critical infrastructure fund that was co-hosted by MOI and the Ministry of Agriculture and Food and the Ministry of Rural Affairs in the summer and we submitted a written response. We continue discussions with MOI to determine the next step related to a possible project with MOI.
In December 2012, OCSI independently conducted a survey of municipalities regarding their experience with asset management planning. With over 100 responses to the survey, OCSI got a good understanding of the progress of asset management planning in the province. Suggestions raised in the survey are being incorporated in future programming of OCSI and the MOI.

OCSI was pleased to welcome Municipal Finance Officers’ Association (MFOA) to its membership in June 2012. This expands the areas of expertise of OCSI from largely technical to also finance.

As we continue to monitor the develop of regulations regarding the Sustainability Plans required under the Water Opportunities Act, we are evaluating ways to support municipalities in this area. We are also looking at an initiative to work with municipalities to promote the implementation of full cost pricing for water.

In the area of communication, OCSI writes quarterly articles which are submitted to member associations to include in their publications to members. OCSI’s website is updated to share events and relevant news (www.on-csi.ca). We are growing our e-mail contact list for our “Infrastructure Network” so we can share news quickly and directly with those who have expressed interest.

Outreach to other organizations has included those such as such as AMO, AMCTO, CEO, OPPI, ORFMA, OSPE, OSWCA, PEO, RPWCO, RCCAO and WaterTAP. We have had contact with provincial ministries such as MOI and Transportation, MOE, Finance, MMAH. We have also made submissions to governments promoting the need for adequate and predictable funding for infrastructure when the opportunity has presented itself, e.g. Federal Infrastructure Roundtable, Ontario provincial budget and $100 million critical infrastructure fund.

**Agreement with CNAM**

In May 2013, OCSI signed a Mutual Understanding agreement with the Canadian Network of Asset Managers (CNAM), showing support for each other’s organizations and their objectives. A benefit of this agreement includes the ability for members of OCSI associations to register for the CNAM annual conference in Toronto (May 20 to 23, 2014) at the CNAM member rate, saving our members hundreds of dollars in registration fees. Further, we negotiated full CNAM membership benefits for our members who register for the conference. This includes access to CNAM’s library of asset management best practices.
This dual membership privilege will expire at the end of the year and at that point it will be up to each individual to renew their membership with CNAM if they are interested in continuing those benefits.

**Hosted Career Panel in London**

On November 7th, 2013, OCSI hosted a panel discussion in London, Ontario as part of the Value of Water Workshop organized by the Canadian Water Network (CWN). The audience for this event included young professionals and students at the post graduate level.

OCSI was invited by CWN to organize a career panel to address “Skills, Career paths, and Challenges related to the Water Industry”. What better organization, than OCSI, to reach out to its constituent associations to bring together an informative, thought provoking and inspirational panel of speakers?

Representing three of OCSI’s member associations, the following panelists engaged the audience, answered questions and challenged the audience to become future leaders in the sustainability of municipal infrastructure:

- Tom Copeland, P.Eng., City of London, Wastewater and Drainage Engineering (representing Municipal Engineers Association (MEA))
- Dan Huggins, City of London, Water Operations, winner of the OWWA meritorious operator award (representing Ontario Water Works Association (OWWA))
- Debbie Korolnek, P.Eng., General Manager, Engineer, Planning and Environment, county of Simcoe (representing Ontario Public Works Association (OPWA))

The panel was moderated by Darla Campbell, P.Eng., Executive Director of OCSI.

**Invitations to Join Working Groups**

In 2013 we were invited to join the Ontario Critical Infrastructure Assurance Program (OCIAP) water working group, led by the Ministry of the Environment (MOE). Three OCSI member associations have agreed to nominate representatives. We are also pursuing the opportunity to participate in the Transportation working group.
Late in 2013 we were also invited by the MOE to participate in Task Group for Lake Erie: Great Lakes Water Quality Agreement (GLWQA) Bi-national Annex 4 (Nutrients), Urban and Rural Municipal Programs Task Group. This Task Group is looking at ways of reducing phosphorus loadings in the Lake Erie Basin. Meetings will alternate between Ontario and Michigan, with the first meeting anticipated in January 2014 in Windsor. OCSI has provided a representative to sit on this Task Group.

**New Project for 2014**

In January 2014, OCSI commenced an exciting project which will support municipalities in their asset management process. As part of this project we will be reaching out to municipalities to establish peer-to-peer groups on sustainable infrastructure planning and coordinating workshops for feedback on the project. Later in the year, OCSI will be hosting a technology transfer workshop where the results of the project will be shared.

**Key Initiatives for 2014**

At its strategic planning session in July 2013, OCSI identified the following key focus areas and initiatives for 2014:

1. **Initiate a Project with Ontario Provincial Ministry:** Work collaboratively with a Ministry and complete at least one project with funding.

2. **Funding Mechanisms:** Provide input to the Province on sustainable funding models for infrastructure and lead/facilitate a public discussion on funding mechanisms.

3. **Communications During a Provincial Election:** In advance of the provincial election, obtain the position of each party on infrastructure issues.

4. **Special Event:** Develop and deliver a special event (such as an infrastructure forum or infrastructure summit) that delivers value to member associations and to participants of the event, advances the mission of promoting safe and sustainable infrastructure, and raises awareness of OCSI.
5. **Raise Profile of OCSI by Networking/Meetings:** Raise profile of OCSI by networking and holding meetings to discuss areas of concern and identify areas of collaboration.

**DISCUSSION**

**Sustainability**

Sustainability is a concept that has many different definitions from many different perspectives. From OCSI’s perspective, the main components of sustainability are: environment, society (service level) and economy (fiscal). See Figure 1. These three components need to be in balance in order to achieve true sustainability.

For municipal infrastructure, this means that the impact on the environment must be considered along with the required service level and the affordability of the plan. This balance has been reflected in the MEA Class Environmental Assessment process for water and wastewater projects, as well as transportation, which is well developed in practice in Ontario.

It is surprising that other levels of government that build infrastructure may not have such a robust process for ensuring sustainability. For example, as identified in the roundtable session on the Ontario Power Authority (OPA) and the Independent Electricity System Operator (IESO) review of energy planning and infrastructure siting in Ontario, public consultation on these projects was not a mandatory part of the process; it was only suggested in the guidelines. The success of the Class EA process lies in the transparency and accountability of presenting options to the public at public meetings or public information centres, and other means of communication. It is not uncommon for the designer and/or planner of a project to not take into account key components of sustainability by not considering engaging the perspective of others.

An ongoing challenge for municipalities will be the need to identify sustainable funding for operation of the infrastructure that they already manage, as well as to find sustainable funding for new infrastructure to service growth. This will be an area of focus for OCSI in the coming years.
SURVEY RESULTS

In December 2012, OCSI conducted some strategic research in the municipal sector which focused on determining the needs of municipalities in meeting their goals for Asset Management Plans (AM Plans).

Research: Understanding the Landscape

We are aware of two surveys that had been launched earlier in 2012 on the topic of asset management plans. One was administered by AMO (June and July 2012), and the other was a phone survey by the Ministry of Infrastructure. Both of these surveys were done prior to the launch of the Guide for Municipal Asset Management Plans (Guide) on August 16th, 2012.

The reason we decided to conduct additional research was that we wanted to hear opinions directly from the municipalities on what they needed to deliver on their Asset Management Plans, and not be limited by the experience (generally in larger municipalities) of the representatives on the OCSI Board.

We completed our research in two phases; the first was qualitative research by contacting four small municipalities and asking open ended questions about their experience with the Guide and their next steps in delivering their asset management plans.

The second phase of our research was a quantitative survey that we delivered by e-mail. This e-mail survey was sent to the members of our associations on the following dates:

- November 29th: OGRA sent notice from OCSI to specific contacts in each municipality. This mailing list covered OPWA and MEA as well.
- November 29th: MFOA sent notice from OCSI to their membership list.
- Dec 4th: WEAO sent the notice from OCSI to their membership list in their weekly e-blast.
- Dec 5th: OWWA sent the notice from OCSI to their membership list as a specific e-mail on this topic.

The survey was open from November 29th to Dec 7th, 2012. In that time period (only nine days), over 125 responses were received. The range of
municipalities that participated was from small to large and evenly distributed. The survey purpose was described as follows:

OCSI would like to get input from municipalities about your process - how you are moving forward in preparing your Asset Management Plan document. We would appreciate if you would participate in a short survey for municipalities.

Survey Participants

Who participated in the survey? Question: What is your primary area of responsibility within your municipality? (check as many as apply)

What size municipalities participated? We were pleased with the even distribution of responses from all sizes of municipalities, in particular, the participation of the very small municipalities (60% of the responses are from municipalities of population of 20,000 and smaller).
Results: What are municipalities saying?

In an open-ended question, municipalities stated their challenge(s) in developing, and then keeping up-to-date, their Asset Management Plan. They responded with the challenge(s) of staff, money and time.

This is similar to the results in the AMO survey:

*Lack of staff and lack of funding are the greatest challenges – 83 per cent of respondents list human resources as an obstacle, and 84 per cent list financial barriers.*

**When did municipalities begin working on their Asset Management Plan (not including PSAB)?** 43% said two years or longer; while 57% are new, starting last year or this year, including 31% who have a plan to start soon.

**How long will it take to complete their Asset Management Plans (to meet the Guide)?** 77% told us it will take 12 months or longer to complete. This is similar to the results in the AMO survey:

*About a fifth of respondents have full asset management plans in place, while more than half have partial plans. Most respondents plan to complete asset management plans in the next five years, but financial constraints are slowing their progress. It’s clear that municipalities need stronger support to build their asset management capacities. These supports should be incorporated into capital investment programs.*

**What do municipalities need to complete their Asset Management Plans?**

In an open ended question, municipalities were invited to submit suggestions on how their member association(s) and OCSI could assist them in meeting the requirements of the Guide. There were nearly 60 individual written responses to this question. The key themes included:

- tools to help with the AM Plans such as templates; examples of acceptable plans;
- training, webinars, seminars, newsletters;
- peer review; auditing services;
- assistance with additional funding, release of money in current funding program; and
- more time to complete the AM Plans.
What additional information or guidelines do you feel would be useful to guide you in preparing your Asset Management Plan? (check as many as apply) This was a specific question that was asked later in the survey, based on OCSI’s qualitative research. The responses are presented, below, by their ranking.

Table 2: USEFUL TOOLS FOR MUNICIPALITIES IN DEVELOPING THEIR ASSET MANAGEMENT PLANS

<table>
<thead>
<tr>
<th>Additional Information or Guidelines</th>
<th>Responses</th>
</tr>
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<tbody>
<tr>
<td>Downloadable templates for various aspects of the AM Plan</td>
<td>86%</td>
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<tr>
<td>Guidelines for expected Level of Service for various types of assets</td>
<td>81%</td>
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<tr>
<td>Sample communication documents for presentation to Council/Public</td>
<td>72%</td>
</tr>
<tr>
<td>Draft terms of reference for hiring consultant</td>
<td>57%</td>
</tr>
<tr>
<td>Clarification of the criteria of what’s required for AM Plans</td>
<td>50%</td>
</tr>
<tr>
<td>Support from peer group of municipalities</td>
<td>47%</td>
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CONCLUSION

Going forward, OCSI will continue to regularly engage with Ontario Provincial Ministries related to infrastructure. Our focus is to identify gaps in infrastructure knowledge base and determine how OCSI can assist the province and/or municipalities. We look forward to jointly hosting CNAM 2014 annual conference in Toronto in May 2014. We will continue to deliver on the key initiatives that were identified at our strategic planning session held in July 2013.

OCSI is a coalition of professional member associations and we exist to serve our member associations. Working together, we are working for you - the members of these associations. Please let us know of key issues and initiatives related to infrastructure of which OCSI should be aware. Through this sharing of information, OCSI can fulfill its mandate to promote Safe and Sustainable Infrastructure.
ACKNOWLEDGEMENTS

The authors wish to acknowledge the Executive Directors from each of our member associations and the Board Representatives who come together to work hard on key issues and initiatives related to infrastructure under the umbrella collaborative called the Ontario Coalition for Sustainable Infrastructure.

ABBREVIATIONS

AMO    Association of Municipalities of Ontario
AMCTO  Association of Municipal Clerks and Treasurers in Ontario
CEO    Consulting Engineers of Ontario
CNAM   Canadian Network of Asset Managers
IAM    The Institute of Asset Management
MEA    Municipal Engineers Association
MFOA   Municipal Finance Officers’ Association
MOE    Ontario Ministry of the Environment
MOI    Ontario Ministry of Infrastructure
MMAH   Ontario Ministry of Municipal Affairs and Housing
OGRA   Ontario Good Roads Association
OPPI   Ontario Professional Planners Institute
OPWA   Ontario Public Works Association
ORFMA  Ontario Regional Facilities Managers Association
OSPE   Ontario Society of Professional Engineers
OSWCA  Ontario Sewer and Watermain Contractors Association
OWWA   Ontario Water Works Association
PEO    Professional Engineers Ontario
RPWCO  Regional Public Works Commissioners of Ontario
RCCAO  Residential Construction Contractors Association of Ontario
WEAO   Water Environment Association of Ontario